

PROJECT TITLE : QA Analytical Services
Period Covered : January 23 to February 23, 1981
Report Written by : A. Widmer

TRIALS WITH NEW SUPPLIES OF TOBACCO INGREDIENTS

- Invert Sugar (for PM production under licence in Italy)
Ref. 1

The sample "IDA" corresponds to the specifications.
The sample "IRDA" (ex Gallarate) was not within the specifications as regards reducing sugars and saccharose contents.

- Liquorice extract (FERTILIZERS & CHEMICALS Ltd., Haifa/
Israel / yellow sheet 5926, 500 g)

The sample was within the specifications. 50 kg for an industrial trial were ordered (16/02/81).

QUALITY CONTROL OF TOBACCO INGREDIENTS

- Diethylene glycol (SIEGFRIED, Zofingen / blue sheet 8232,
2000 kg)

The analytical values were within the specifications.
However, the product was of a yellow colour and the shipment was therefore refused.

- MFSBC Powder (PMG, Munich) - Ref. 2

161 drums out of 165 of the last shipment were mislabeled:
Instead of "MFSBC Powder", the drums were labelled "MFSB
Base", together with the code number of "MF (S) Powder Base".

The contents were identified by analyses and organoleptic tests
as being "MFSBC Powder". Later, these results were confirmed
by PMI.

TRIALS WITH NEW SUPPLIES OF FILTER INGREDIENTS

- Activated charcoal (CHEMVIRON, Zürich; "UKCT" / yellow sheet 5418, 14.4t) - Ref. 3

The following test cigarettes were produced:

<u>Brand:</u>	<u>Date of evaluation:</u>	<u>Remarks:</u>
MAA (non diluted)	23.09.79	
MAA (non diluted)	01.11.79	
BRD	01.11.79	
MAA (diluted)	25.03.80	25 % CHEMVIRON and 75 % PICA normal
BRD	25.03.80	25 % CHEMVIRON and 75 % PICA normal
MAA (non diluted)	12.02.81	

Subjective evaluation: All these trials were rejected as regards taste. The 14.4 t were therefore rejected for FTR-production. Concluded on 23.02.81.

- Activated charcoal (CHEMVIRON, Zürich; "MF III" / yellow sheet 5428, 14.4 t) - Ref. 3

The following test cigarettes were produced:

<u>Brand:</u>	<u>Date of evaluation:</u>	<u>Remarks:</u>
MAA (non diluted)	01.11.79	
BRD	01.11.79	
MAA (diluted)	25.03.80	25 % CHEMVIRON and 75 % PICA normal
BRD	25.03.80	25 % CHEMVIRON and 75 % PICA normal
MAA (non diluted)	12.02.81	

Subjective evaluation: All these trials were rejected taste-wise. The 14.4 t have therefore been rejected for FTR-production. Concluded on 23.02.81.

TRIALS WITH NEW SUPPLIES OF GLUES

- Filter glue (Hot Melt) (HENKEL CHEMIE GmbH, Pratteln;
"TECHNOMELT Q 2267 Z" / yellow sheet 5870, 8 kg)

Machineability: Identical to the standard glue.

Storage: After two months no difference between this and the standard glue was observed.

Subjective evaluation (MLF-CH): The trial was preferred by the experts. However, a significant difference to the standard cigarette was found. On the basis of these results this glue will not be applied as a standard glue.

Concluded on 26.01.1981.

- Filter glue (Hot Melt) (LAESSER AG, Erlinsbach; "LESSOTHERM 2088-5" / yellow sheet 5907, 1 kg)

The Hot Melt "THÜRMER SK 1097" was used as a standard glue on normal filter paper. When porous plug wraps were introduced, sticking problems were encountered with this type of glue.

In order to use up the stock of 5.6 t, a mixture of 20 % "THÜRMER SK 1097" and 80 % "LESSOTHERM 2088" was manufactured by LAESSER.

Machineability: No significant difference to the standard glue was observed.

- Filter glue (Hot Melt) (LAESSER AG, Erlinsbach; " LESSOTHERM 2088-5" / yellow sheet 5914, 1 kg)

On the basis of the results described above a mixture of 50 % "THÜRMER SK 1097" and 50 % "LESSOTHERM 2088" was manufactured by LAESSER.

Machineability: No significant difference to the standard glue was observed.

Subjective evaluation (Panel B, MLF-CH): No significant difference to the standard.

100 kg of this glue were ordered for a more important trial (16.02.81).

- Seam glue (LAESSER AG, Erlinsbach; "LESSO 1487 x 3, PLUS PLUS"/ yellow sheet 5854, 100 kg)

This liquid starch glue is of a higher viscosity (33'000 cps instead of 17'000 cps) than the standard. An increase of viscosity should give improved flexibility for the application on different papers.

Machineability: As good as the standard glue.

Subjective evaluation (MLF-CH): The test cigarettes are not acceptable.

Nevertheless further trials with higher viscous starch glues are planned.

- Seam glue (SWIFT, Blois/France); " M 5675 AX" / yellow sheet 5910, 5 kg)

The glue is based on PVA. Special permission to use it until March 21, 1981, was granted by the German authorities. Machineability: The glue has a better adherence than the standard glue.

Subjective evaluation (MLF-CH): No significant difference was found. Acceptable.

As long as problems such as legislation on a European level, application to different papers and machines, economics, etc. are still pending, this product will not be used as a standard glue.

PRODUCT QUALITY

- DIANA (Italy) - Ref. 4

After a bad taste in DIANA-cigarettes, produced in Lecce, was found, the ingredients (diethylene glycol, sorbitol, invert sugar, cane sugar, cocoa powder, liquorice in blocks and water), the solutions (AC with the corresponding base and PC) and the glues used in the production centers of Lecce and Verona were analysed.

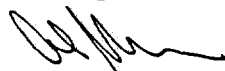
All products used in Verona were within the specifications or corresponded to the theoretical values. On the products used in Lecce, the following irregularities were found:

- cocoa powder: The fat content was too low. It corresponded to half of the value indicated in the specifications.
- Liquorice in blocks: The glycyrrhizic acid-content was far too high.
- PC-solution: Upon arrival in the laboratory, the solution was fermented. It appeared that it was not usual practice to add a conservative agent when stocking the solution for more than 24 hours.
- AC-solution: The ethanol content was significantly below the theoretical value.

SERVICES FOR OTHER GROUPS

- Analyses for NINO (Mr. N. Lüthy)
SiO₂ in 9 samples
- Analyses for MONIQUE (Mr. P. Karbacher)
SiO₂ in 4 samples

QA Analytical Services



A. Widmer

REFERENCES

1. Letter from A. Widmer to Mr. A. Trento, dd 06.02.81
2. Letter from Mr. B.W. Lutzig to A. Widmer, dd 04.11.80
Letter from A. Widmer to Mr. B.W. Lutzig, dd 28.01.81
3. Monthly report A. Widmer, November 1979
4. Letter from A. Widmer to Mr. A. Trento, dd 06.02.81